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ABSTRACT

The study summarized in this report was designed to explore some questions concerning the application of cooperative learning for gifted students. A survey of 301 educators belonging to either gifted education or cooperative learning associations found that the two groups held strongly differing views. Members of the gifted education group were more likely to feel that the curriculum used in cooperative learning is often not challenging enough for gifted students, that little evaluation of cooperative learning involving gifted students has been done, and that gifted students resent being placed in the role of "junior teacher." Members of the cooperative learning group were more likely to feel that gifted students develop critical social and leadership skills in cooperative learning environments, that gifted students develop higher self-esteem by being team leaders in cooperative learning groups, and that cooperative learning is a strategy which enables teachers to educate all students. Both groups agreed that teachers need more preparation in appropriate uses of cooperative learning with gifted students and that cooperative learning strategies might be used to eliminate ability grouping. (JDD)

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Short Report

Cooperative Learning and Gifted Students: A National Survey

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June, 1993

Gifted Education Policy Studies Program

The rapidly increasing use of cooperative learning (CL) in classrooms has raised some questions regarding its application for gifted students. The Gifted Education Policy Studies Program (GEPSP) at the University of North Carolina at Chapel Hill has pursued these questions out of growing concern about how the needs of gifted students were being met within the heterogeneous grouping of CL classrooms (Gallagher, Coleman, & Nelson, 1993). Cooperative learning has been offered as a successful strategy to address student needs in small heterogeneous groupings, yet little attention has been paid to how gifted students respond or are affected by this strategy. In this context, the attitudes of the professionals committed to cooperative learning and of those working with gifted students were explored to see whether their views about the use of CL with gifted students differed.

Method

As an initial step to understanding the attitudes of educators from both groups, we developed a survey to identify the areas of concern and agreement on the use of cooperative learning with gifted. Six major themes were identified from expert opinion: (a) teacher preparation; (b) which forms of CL work best with gifted students; (c) combining CL with gifted education; (d) meeting social and emotional needs of gifted students through CL; (e) evaluation of CL with gifted students; and (f) the use of ability grouping during CL activities.

The first section of the survey contained 27 Likert-type items which asked respondents to rate their opinions on each item a four point scale. In addition, the respondents were asked to prioritize the six major themes and were invited to make open-ended comments on CL and gifted.

The survey was mailed to 400 participants who were randomly selected from the mailing lists of four organizations (100 to each): The International Association for the Study of Cooperation in Education (IASCE); the Cooperative Learning Network of the Association for Supervision and Curriculum Development (ASCD); The Association for the Gifted (TAG); and the National Association for Gifted Children (NAGC). The return rate of 75% was unusual and gave us confidence that the results represented the sample we originally polled.

Results

Results from the Attitude Scale

The results from the first section of the survey showed a striking difference between groups responding in all but two clusters (see Figure 1).

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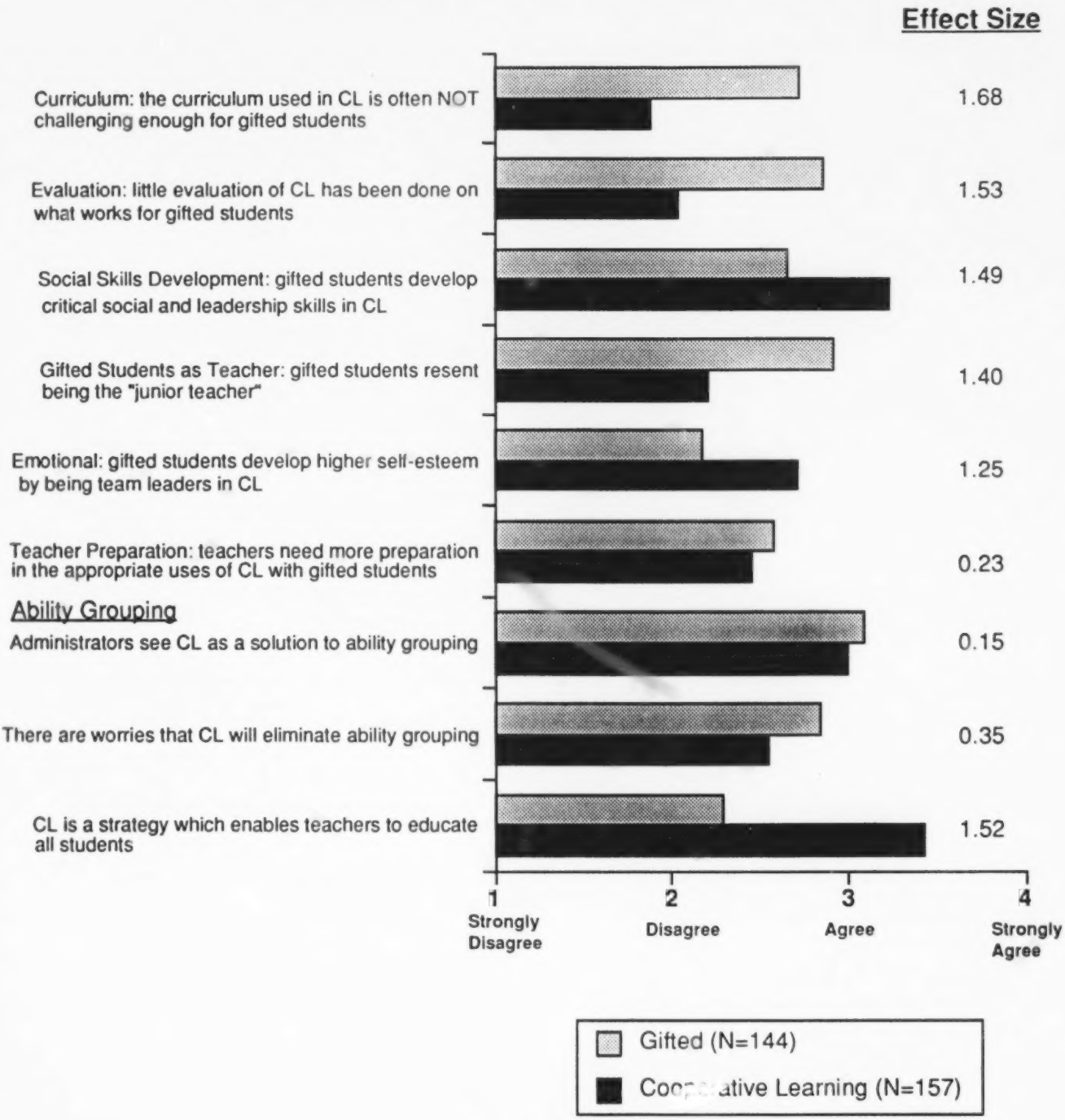
Figure 1

Response to Item Clusters from Cooperative Learning and Gifted Educators


Effect Size
Curriculum: the curriculum used in CL is often NOT challenging enough for gifted students
1.68
Evaluation: little evaluation of CL has been done on what works for gifted students
1.53
Social Skills Development: gifted students develop critical social and leadership skills in CL
1.49
Gifted Students as Teacher: gifted students resent being the "junior teacher"
1.40
Emotional: gifted students develop higher self-esteem by being team leaders in CL
1.25
Teacher Preparation: teachers need more preparation in the appropriate uses of CL with gifted students
0.23
Ability Grouping
Administrators see CL as a solution to ability grouping
0.15
There are worries that CL will eliminate ability grouping
0.35
CL is a strategy which enables teachers to educate all students
1.52
1 Strongly Disagree
2 Disagree
3 Agree
4 Strongly Agree
Gifted (N=144)
Cooperative Learning (N=157)

The cluster items and an explanation follow.

1. Curriculum: THE CURRICULUM USED IN CL IS OFTEN **NOT** CHALLENGING ENOUGH FOR GIFTED STUDENTS.

This issue showed the most striking difference between the groups with an effect size of 1.68. (Effect size represents the difference between the means divided by the standard deviation of the total sample) The gifted and talented (GT) respondents agreed strongly with this statement, but the statement was rejected by the CL group.

2. Evaluation: LITTLE EVALUATION OF CL HAS BEEN DONE ON WHAT WORKS FOR GIFTED STUDENTS.

The large effect size of 1.53 again showed strong group differences. The GT group apparently felt that the cooperative learning research had not focused on issues related to gifted students. In contrast, the CL group believed strongly that such attention had been paid.

3. Social Skills Development: GIFTED STUDENTS DEVELOP CRITICAL SOCIAL AND LEADERSHIP SKILLS IN CL.

The topic of social skills development yielded similar differences between the two groups with an effect size of 1.49. The CL group agreed with the sentiment that gifted students develop critical social and leadership skills through cooperative learning whereas the GT respondents expressed disagreement or mixed feelings.

4. Gifted Students as Teacher: GIFTED STUDENTS RESENT BEING THE "JUNIOR TEACHER."

An effect size of 1.40 was found in this cluster. The GT respondents agreed with this statement and seemed concerned that gifted students were often being placed in a role for which they had not been prepared, and they did not seem to relish it. As a group, the CL respondents were in disagreement with this sentiment.

5. Emotional: GIFTED STUDENTS DEVELOP HIGHER SELF-ESTEEM BY BEING TEAM LEADERS IN CL.

To the suggestion that gifted students develop critical social and leadership skills through cooperative learning experiences and that they gain higher self esteem by being team leaders, the CL group agreed whereas the GT group disagreed. The effect size for this comparison was 1.25.

6. Teacher Preparation: TEACHERS NEED MORE PREPARATION IN THE APPROPRIATE USES OF CL WITH GIFTED STUDENTS.

This was one cluster item that yielded little or no differences between the groups. There was general agreement that teachers needed more preparation in the appropriate uses of cooperative learning with gifted students. The low effect size of .23 indicates this consensus.

Ability Grouping:

The ability group cluster items did not have sufficient interrelationships (Cronbach's Alpha) to maintain a cluster, and therefore, the items were analyzed individually.

(a) ADMINISTRATORS SEE CL AS A SOLUTION TO ABILITY GROUPING.

There were no essential differences between the groups (effect size =.15) on this item. There was agreement that educational administrators might use CL strategies to eliminate grouping.

(b) THERE ARE WORRIES THAT CL WILL ELIMINATE ABILITY GROUPING.

With an effect size of only .35, there was little disagreement between groups that CL could be used as reason to eliminate ability grouping and reduce services for gifted students.

(c) CL IS A STRATEGY WHICH ENABLES TEACHERS TO EDUCATE ALL STUDENTS.

This was one item related to ability grouping that did show a striking difference between groups. An effect size of 1.52 reflected a strong disagreement. The CL group enthusiastically agreed with the sentiment, while the GT respondents disagreed.

Results on Priority Setting

Some striking group differences were found in the prioritizing of the major issues. For the CL educators, the prime issue was teacher preparation, with over 50% of the sample choosing this issue as the most important. In contrast, the GT educators split their concern among several issues. The item named most important (26%) was the appropriate use of grouping with gifted students and cooperative learning. Also of concern were teacher preparation and which cooperative learning methods work best with gifted students.

The second most important issue, from the standpoint of CL educators, was how to combine CL with the gifted curriculum. From the standpoint of GT educators, their second most important issue was divided. They agreed with the CL educators that combining CL with the GT curriculum was an important issue, but also identified which cooperative learning strategies work best with gifted and talented students as a priority.

Results from Spontaneous Comments

Respondents were encouraged to make additional comments at the end of the survey. The written responses paralleled the first and second sections of the survey. There appeared to be a general across group agreement that more staff development is needed on the appropriate uses of cooperative learning with gifted students. There was a marked disagreement between the two groups on the use of cooperative learning in specific settings. Some of the GT sample had favorable comments to make about CL when used with clusters of gifted students but not when used under the heterogeneous model being supported by many CL leaders.

Discussion

This survey clearly revealed strongly differing views from the two groups of educators: those supporting cooperative learning and those supporting gifted education. These findings seem to reflect the debate in the literature. However, a resolution to these differences is complicated by the use of CL in the policy domain. No one seems to doubt that CL, as a general approach, is a positive set of instructional strategies. CL makes students more active learners, encourages interaction and cooperation, and appears to improve student morale. What is in dispute is whether this strategy can replace traditional services for gifted students.

The two groups seemed to be responding to the survey on an emotional basis with proponents of CL strongly arguing for its benefits, while educators of GT students expressed concern about the uses of CL. These opinions seemed to be formed in spite of little research/knowledge about how CL actually affects gifted learners and may stem from the way CL has been used in some school systems to reduce services for gifted and talented students.

Educators of gifted students need to learn more about some of the specific adaptations of cooperative learning. Educators employing CL need to understand the special needs of gifted students for intellectual challenge. With both groups agreeing that teacher preparation is an essential need, it would seem reasonable that this could be a beginning point for a meaningful sharing of ideas and information.

Recommendations

The following recommendations seem warranted on the survey results:

1. Collaborative planning of personnel preparation opportunities should be carried out where expertise in both CL and GT education can be shared. These opportunities should address the needs of both pre-service and in-service educators.

2. Research should be initiated on the most appropriate ways to address the needs of gifted students through CL, including both heterogeneous and homogeneous grouping formats.

3. Opportunities should be created for leaders in CL to share information with gifted/talented educators and for GT leaders to share with CL groups. This should include cross-fertilization through conferences and publications.

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Anyone interested in the Gifted Education Policy Studies Program full report on Cooperative Learning may write or call:

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